Date=10/09/2020
Lecture By=Arkesh Jaiswal
Subject ⇒ System Design=3

IN PREVIOUS LECTURE **(QUICK RECAP)** **Date-09/02/2020**	**In Today's Lecture (Overview)**

Youtube Data Structure(How youtube works)
 	
Whatsapp data structure
 	
Mcqs
 	
Questions for self practice
	How Quora Works
	    FE(Frontend)
	    BE(Backend)
	    DB(Database)
	
	How Google Dropbox Works
	    FE(Frontend)
	    BE(Backend)
	
	Question For Self Practice

Today we learned how Quora and google drop-box Works

How Quora Works

FE(Frontend)

Feed => Answers will be sorted by upvotes * => for every received answer, PARSE and fetch image from links

User profile

Search (input and results area).

Ask a question *

Answer a question.

Upvote / downvote answers *

Comment on answers

Follow users

Follow topics

Suggested questions *
(Share => purely a FE function, does not require a separate code on the BE)

Notifications

BE(Backend)

AUTH => log in (read) / sign up (create)

FETCH USER DATA FROM DB

SEARCH

GET FEED FOR LOGGED IN USER (ML)

FIND BEST RELATED QUESTIONS (ML)

FOLLOW TOPIC => Add entry into db

FOLLOW USER => Add entry into db

ASK QUESTION => Add entry into db

ANSWER QUESTION => Add entry into db (upvotes 0)

UPVOTE ANSWER => update upvotes count in db

GET COMMENTS => Used in the feed function

ADD COMMENT => Add entry into db

NOTIFICATIONS (segregate triggers, tie appropriate triggers to users)

DB(Database)

users [firstname, last name, username, email, password_hash, phone_number, city, profile_pic_link] questions [title, description, date, topic_id] answers (content, question_id, user_id, date]

votes (answer_id, vote_type, user_id]

topics [title] user topic_map [user id, topic_id]

user folloer_map [user_id, follower_id] comments [comment_content, answer_id, user_id, date

notifications [contat, user_id]

S3

images > generate public link to access

CRUD

! img: url

fsb nbfi

list

How Google Dropbox Works

Dropbox

FE(Frontend)

auth

folders => files |

upload, download, share

BE(Backend)

auth

fetch folder info (folder_id) => return contents

download function(filename) => return file ith download signature

upload function (filepath) => uploadToStorageServer (filepath) > return secure link

share function(file, access level) => modify security pass on StorageServer

StorageServer > CDN

security pass for each link can be disabled if file made public

Question For Self Practice

Design an online stock brokerage app